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Title of Thesis — Titre de la thèse

OBSERVING SOCIAL TRANSGRESSIONS and SUBSEQUENT HELPING BEHAVIOR: A COGNITIVE SOCIAL NORM INTERPRETATION

University — Université

ALBERTA

Degree for which thesis was presented — Grade pour lequel cette thèse fut présentée

Ph.D.

Year this degree conferred — Année d'obtention de ce grade

1980

Name of Supervisor — Nom du directeur de thèse

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OBSERVING SOCIAL TRANSGRESSIONS AND SUBSEQUENT HELPING BEHAVIOR: A COGNITIVE SOCIAL NORM INTERPRETATION

by

© MICHAEL D. HARVEY

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF PSYCHOLOGY

EDMONTON, ALBERTA

FALL, 1980

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THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Observing Social Transgressions and Subsequent Helping Behavior: A Cognitive Social Norm Interpretation".

submitted by Michael D. Harvey

in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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Date..June 24, 1980.....

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ABSTRACT

Research has shown that persons who observe a social transgression are subsequently more willing to help than are persons not so exposed. The explanations that have been proposed for this effect emphasize drive reduction processes (Cialdini, Darby, & Vincent, 1973): The transgression event produces in the observer a negative affective state which is then eliminated via helping behavior. These explanations are unsatisfactory in several respects, however, and the present research examines a cognitive social norm explanation for the transgression helping effect.

The cognitive model assumes that social norms are represented within an organized knowledge structure in memory. It is proposed that these representations are associated with each other in varying degrees, such that some pairs are more closely organized than others, and that a spreading activation process (Collins & Loftus, 1975) also occurs. The model explains the transgression-helping effect by proposing that the observation of a transgression activates the cognitive representation of the relevant social norm, which in turn facilitates access to the representation of the helping norm to the extent that the two are closely organized. When a subsequent helping situation occurs, access to the helping norm will be more likely, resulting in a greater likelihood of helping.

Two experiments were conducted to examine this

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hypothesis. In Experiment 1 subjects made paired comparison similarity judgments for a set of social norm statements. Three of these (concerning interpersonal harm, property damage, and speed limits) were selected for Experiment 2 based upon their degree of judged similarity to the helping norm (closely, moderately, and remotely related, respectively). In Experiment 2 one of these three social norms was either made salient to subjects or not, and in the norm salient conditions there was either a norm transgression or a norm compliance. Following this Salience Outcome manipulation subjects had a choice of activities, one of which was an opportunity to help.

The results confirmed the predictions of the cognitive model. Subjects were more willing to help when a social norm closely related to the helping norm (*viz.* Harm) was made salient prior to the helping opportunity than when a remotely related social norm (*viz.* Speed) or no social norm was made salient. Prior exposure to a norm transgression or norm compliance had equivalent effects on helping. The pattern of helping behavior could not be explained by a negative affect reduction model. The importance of the research, and the cognitive model, for social norm explanations of helping behavior, and of social norm based behavior in general, was discussed.

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DEDICATION

for

M. E. E. & K. E. H.

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ACKNOWLEDGMENTS

First mention on my list of people to thank is Michael Enzle. Like all good supervisors, he was convinced before I was that the research would be a success (cf. the Extra-ordinary acknowledgment, next page).

Members of my examining committee, Brendan Rule, Gary Wells, Allen Dobbs, Andy Harrell, and Dan Wegner, were very helpful, providing useful comments on previous drafts, and encouragement toward future research. I also thank the committee as a whole for making my oral exam a rather pleasant experience (by comparison with other exams, of course). In this regard, Al's question regarding which of my given names I preferred probably did more to set the tone of the exam than did my refusal to answer the question.

My thanks is also extended to Nick Arscott, Vaughin Cox, Lorna Hall, Peter Hansen, Carol Codish, Hilary Linus, Mark Logar, Monica Matzelle, and Rob McTavish for their assistance in collecting the data.

Thank you, Natalie, for typing, and re-typing, and re-typing, and fussing with the computer for me. As you all know, I hate computers. They scare me. They're inhuman.

EXTRAORDINARY ACKNOWLEDGMENT

During the first frustrating week in the lab, when I was fine-tuning the procedure for the major experiment, a *Doonesbury* comic strip that increased my hopes for success appeared in the local paper. I regret that I cannot reproduce it here in all its glory, but I can reproduce the dialogue.

POLLSTER: Okay, let's move right along to the national mood questions, shall we?

ZONKER: "Do you feel the crisis in Iran and Afghanistan have brought people together and made them more willing to make sacrifices?"

DOONESBURY: Well, now that you mention it ...

ZONKER: Definitely.

DONNESBURY: It is the first time everyone's paid the phone bill.

ZONKER: Right. And before the invasion, I *always* got stuck with the dishes.

It may not be as theoretically precise a statement of the research hypothesis as a dissertation committee demands, but its pretty damn good.

Thank you, Garry B. Trudeau

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INTRODUCTION

Much experimental research has shown that persons help more and/or more often when a transgression of some kind occurs prior to the opportunity to help than when no such prior event occurs. This phenomenon has been found in a wide variety of circumstances. Persons who are in some way responsible for the transgression have been found to help both the victim (Carlsmith & Gross, 1969; Freedman, Wallington, & Bless, 1967) and a third-party (Darlington & Macker, 1966, Regan, Williams, & Sparling, 1972; Katzev, Edelsack, Steinmetz, Walker, & Wright, 1978). In addition, witnessing someone else's transgression has been found to increase observers' helping (Cialdini, Darby, & Vincent, 1973; Freedman et al., 1967; Rawlings, 1969, 1970; Regan, 1971).

The explanations for this phenomenon that have been proposed in the literature emphasize drive-reduction processes, in that a transgression is hypothesized to produce in the perpetrator and the witness some type of negative arousal state, which is then eliminated through the act of helping a needy person. Several authors (Freedman, 1970; Freedman et al., 1967; Darlington & Macker, 1966; Rawlings, 1969, 1970; Carlsmith & Gross, 1969) have proposed that guilt is the intervening variable that accounts for the transgression-helping relationship. Guilt has been defined as the aversive state (Freedman, 1970) that accompanies the belief that one has

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blocked another's goal (Darlington & Macker, 1966), or that one has broken some moral code of conduct (Freedman, 1970; Rawlings, 1969, 1970). While the guilt hypothesis provides an adequate explanation for why transgressors help their victims or a third-party, it cannot readily explain why witnesses would also help more as a result of another's transgression (cf. Cialdini et al., 1973).

In accounting for the witness effect, Rawlings (1970) proposed the concept of anticipatory guilt; that is, a guilt feeling that arises when one's possible action is perceived to deviate from a moral norm. Rawlings proposed that this feeling of anticipatory guilt would occur for a person who first witnesses a transgression in some setting, and who then becomes an actor in the same or similar setting. According to this model, observing the violation of the norm makes the norm (i.e., the appropriate behavior) more salient to the perceiver, and subsequently the perceiver is more likely to conform with the norm. Rawlings examined this hypothesis in a setting in which subjects first observed "teacher" shock a "learner" for errors and then had the opportunity to alleviate the intensity of the shock to the "learner" by accepting some of the shock themselves. While the results were consistent with Rawlings' predictions, the high degree of similarity between the observation setting and the helping setting limit the generality of the findings. The results show only that increasing the salience of a particular norm (e.g., people

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should not harm others) might lead the observer to avoid a violation of the *same* norm (i.e., to avoid causing harm to another), but to not show unambiguously that the salience of a general *helping norm* has been increased. The anticipatory guilt hypothesis proposed by Rawlings (1970) cannot easily account for increased helping in experiments in which the observation phase (e.g., the observation of interpersonal harm) and the helping phase (e.g., opportunity to donate time or money to some cause) are distinctly different events.

A more general aversive internal state, a negative self-image or lowered self-esteem, has been proposed to mediate the transgression-helping effect by Carlsmith & Gross (1969) and by McMillen (1971). Unlike guilt, which requires some expiatory behavior in order to be reduced, a negative self-image can be eliminated via any event or action that will "repair" the damaged self-image experienced by the transgressor. McMillen (1971) examined this hypothesis by inducing some subjects to cheat, thus (presumably) lowering their self-esteem. Between this manipulation and the request for help half the subjects were given very flattering feedback from a personality test, a manipulation designed to "repair" their self-esteem. Consistent with the predictions, "repaired" subjects helped less frequently than non-repaired subjects. While these results support the notion that transgression may produce a more general negative state than guilt, the image repair hypothesis, like the guilt hypothesis, cannot account

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for the witness effects.

Cialdini et al. (1973) have proposed that an even more general negative affective state intervenes between a transgression and helping, and contend that this state is experienced by transgressors and witnesses alike. They proposed that the observation of a harmed other causes the observer to feel bad, and that the observer will then behave in a manner that will make him/her feel better. This proposition is similar to that of McMillen (1971), in that an intervening mood-elevating event can eliminate the increased tendency to help. The intervening affective state, however, is less specific in its characteristics and referents, and is assumed to be experienced not only by the transgresor, but by any observer of a transgression. Like McMillen (1971), Cialdini et al. (1973) contend that any positive event or any action by the observer/transgressor that could reduce the negative affect will be sought by the observer/transgressor in order to relieve the negative affective state. Cialdini et al. consider the act of helping someone in need to have positive consequences for the helper, and therefore helping is one method of negative state relief. However, Cialdini et al. propose that helping is unnecessary, and will not occur, if an intervening event has already relieved the negative affect state.

In Cialdini et al. (1973) subjects either caused a box of data cards to spill or witnessed an experimenter cause the cards to spill. One of four intervention conditions followed

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this manipulation and preceded an opportunity to perform a helpful act; (1) the subject was left alone for five minutes, (2) the experimenter administered a picture rating task, (3) a monetary reward was administered following the picture rating task, or (4) the experimenter administered a maze task and gave verbal praise for performance. The first two interventions were designed as no-relief conditions while the latter two were relief conditions, and Cialdini et al. predicted and found greater helping in the former than in the latter conditions. The dependent measure was the number of phone calls that the subject was willing to make for a third-party (i.e., a person other than the victim of the transgression).

The Cialdini et al. negative state relief hypothesis has been the most recent attempt to explain the transgression-helping phenomenon, and virtually no further research on this topic has appeared since in the literature (Katzev et al., 1978, is an exception). There are, however, several reasons for questioning the adequacy of the negative state relief hypothesis. (*1*) There is no evidence for the proposition that transgressors, or more generally, those who commit immoral acts, subsequently experience a *general non-specific* negative affective state (Klass, 1978). Rather, the literature reviewed by Klass (1978) suggests that the negative affect experienced by transgressor is specific to the particular immoral act in question. It is possible, for example, that the negative affect is identified directly with the moral norm that has been

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broken. (2) The assumption that witness of a transgression also experience general negative affect may not be tenable, and it is certainly not obvious that they should experience the same intensity of negative affect as the transgressor. One would expect the negative affect of the transgressor to be more intense. Implicit in the negative state relief hypothesis is the prediction that greater negative affect will result in greater amounts of help, yet Cialdini et al. predict equivalent helping from transgressors and observers. It is difficult to accept, unsupported by experimental evidence, the proposal that the observer of such minor harm as accidentally spilled data cards (the transgression employed by Cialdini et al.) experiences negative affect of any significant duration, let alone at an intensity equal to that experienced by the perpetrator. (3) The research conducted by Cialdini et al. (1973) in support of their hypothesis is confounded by the manner in which the intervening events are introduced. Specifically, the intervention manipulation confounds the type of intervention and the type of observer with the amount of attention that the observer can focus upon the transgressor, in a manner that permits a viable alternative explanation for their results. Briefly, the results appear to show that even in the absense of a positive intervening event, any intervention that distracts attention from the transgressor or the transgression decreases helping.

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In view of these problems, a cognitive social norm explanation is proposed. This explanation employs an adaptation of the Collins and Loftus (1975) theory of semantic memory applied to knowledge about social norms. A major feature of the Collins and Loftus (1975) theory is a spreading activation process, which refers to the manner in which a memory search proceeds. When the representation of some concept is activated, the activation spreads to the representations of related concepts. The degree to which a related concept is activated depends upon the strength of relation between the two concepts, or the accessibility of one representation given the activation of another. (Accessibility is operationalized as semantic similarity or semantic relatedness). Further assumptions of the Collins and Loftus (1978) theory are that some minimum amount of activation is required before the representation of a concept is activated, and that the activation of a concept from different sources summates to produce this threshold value.

An example should clarify this process. When the stimulus word "DOG" is presented, the representation of the concept "dog" is activated, and activation immediately begins spreading to related concepts, such as other pets, animals, etc. There should be more activation of the concept "cat" than at the concept "mink" due to the greater semantic similarity between dog and cat. Suppose that a drawing of an animal that could be either a drawing of a cat or a mink is then presented. This

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stimulus might produce activation of both "cat" and "mink" to some extent, but due to the greater prior activation of "cat", the drawing will more likely be reported as a cat. The prior presentation of "DOG" facilitates to a greater extent access to "cat" than to "mink", and therefore "cat" rather than "mink" will be reported in response to the ambiguous drawing.

The cognitive model proposed here assumes that this spreading activation theory can be applied directly to the domain of social norms and social behavior. Social norms are general statements regarding appropriate and inappropriate social conduct (see Pepitone, 1976; Schwartz, 1973, 1977; Staub, 1972). It is assumed that knowledge of these social norms is represented in memory, and that these representations are organized such that there are relations or associations among these representations. The model proposed here retains the features of the Collins and Loftus (1975) theory as described above with the exception that social norm representations replace the noun representations employed by Collins and Loftus (1975) as the knowledge domain of interest. Thus, it is proposed that activation spreads from one social norm representation to related social norm representations, and the accessibility of these related social norm representations is thereby facilitated.

With respect to the transgression-helping effect, it is proposed that the observation of a transgression activates the relevant social norm representation. If the transgression

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event is followed by a helping situation, for example, the representation of the helping norm will be more easily accessed to the extent that the helping norm has already been activated due to the activation of the transgression relevant norm. The closer the relationship between the transgression relevant norm and the helping norm, the greater the facilitation effect, and the greater the probability that the helping norm will be activated. In contrast with previous models, which emphasized the process of negative affect reduction, the proposed model considers norm activation and the relations among social norm representations to be the important factors mediating the transgression-helping effect. While there is no direct evidence to support the proposed explanation, there do exist results that are better explained by a cognitive model than by a negative affect reduction model. These supportive findings are reviewed below.

An examination of the attention confound in Cialdini et al. (1973) reveals differences that can be accounted for by the cognitive model. This confound is most clearly apparent in the no-relief conditions, in which Cialdini et al. predicted uniformly high rates of helping. When no intervening task was administered, the experimenter left the subject alone in the room. Thus, when the subject is the transgressor, he is able to attend to himself without distraction, but when the experimenter is the transgressor, and is absent, attention to the transgressor is reduced. If the presence or absence of the

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transgressor affects maintenance of the salience of the transgression, and of the relevant social norm, then there would be greater activation of the norm in the *S*-transgressor condition and lower activation in the *E*-transgressor condition when no intervening task is presented. The experimenter is present, however, when the picture rating task is administered. When the experimenter is the transgressor, then, the activation of the social norm is greater, but when the subject is the transgressor the activation of the social norm might be reduced, since the subject must attend to the experimenter and the task at the expense of attention to the transgression. Re-organized in terms of degree of attention to the transgression, or norm activation, the results in the no-relief conditions of Cialdini et al. clearly indicate greater helping (number of phone calls volunteered) when attention is high (M = 5.86) than when attention is low (M = 3.44; no transgression control M = 2.75). A similar effect of smaller magnitude is also evident in the relief conditions of Cialdini et al. (1973).

The effect of the attentional differences can be explained by the proposed cognitive model. An event that occurs between the initial activation of the transgression norm and exposure to the helping situation will affect the degree to which the access to the transgression norm is maintained, which in turn directly affects its facilitative effect on the accessibility of the helping norm. The continued presence of the

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transgressor can be expected to promote maintenance of norm activation, while the introduction of irrelevant positive consequences for the observer (as in the relief conditions), or other distractions, can be expected to disrupt or severely reduce norm activation and the spreading activation process.

Katzev et al. (1978) employed two field settings in which transgressions frequently occurred; a museum setting, in which touching of objects occurred despite signs prohibiting such behavior, and a zoo setting, in which the animals were often fed "unauthorized" food (although there were no explicit regulation to the contrary). In the museum setting some of the transgressors were reprimanded ("Please don't touch the objects. If everyone touched them, they will deteriorate."). Subjects were then exposed to an opportunity to help, and Katzev et al. found greater helping in the reprimand condition, but not in the no-reprimand condition, compared with the control condition. In the zoo setting the severity of the reprimand was varied; the mild reprimand was "Please don't feed the animals unauthorized food," and the severe reprimand was "Hey, don't feed the animals unauthorized food. Don't you know it could hurt them?" In this setting, greater help occurred only following the severe reprimand.

These results further qualify the transgression-helping effect. In the museum setting a transgression *by itself* was not sufficient to increase helping, but the reprimand, which included justification for the rule, did increase helping. In

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the absence of the reprimand, transgressors may have perceived the prohibition to be arbitrary and unimportant to them (e.g., believed it to be applicable only to children). The reprimand, however, made very salient to the transgressor the reason for the prohibition, and the possible negative consequences of the transgression. In the zoo setting, on the other hand, there was no stated regulation prohibiting the feeding of unauthorized food. Thus, in the mild reprimand condition transgressors would not have perceived themselves to have transgressed any code of conduct. The severe reprimand, however, included justification for the implicit prohibition with the statement that unauthorized feeding could harm the animals. This added statement might make salient norms that proscribe harm to animals, and norms that proscribe harm in general. By this analysis of the Katzev et al. manipulations, their results showed increased help following transgression only when a social norm was made salient to the transgressor.

Some of the literature concerning the observation of models is also relevant to the present analysis. From certain perspectives within the developmental literature (e.g., Hoffman, 1975; Rushton, 1975, 1976) models have their effects by providing the observer with information regarding the appropriate, or normative, behavior within a particular setting. At some point in the socialization process, then, persons have acquired knowledge of the social norms relevant to many situations. Subsequent exposure to models in these

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situations would not result in new learning, but would instead lead to the recognition of the modeled behavior as normative or not. In other words, the model would increase the salience of the social norm relevant to the observed situation regardless of the model's actual behavior. Bryan and Test (1967) employed an increased norm salience rationale for explaining the effects of helping models on the helping behavior of adults. According to Bryan and Test (1967), observing a model helping to change a tire, or donating to The Salvation Army, increased the helping behavior of the observers because the model's behavior reminded them of the norm of social responsibility.

More relevant for the present analysis however, are the studies that exposed the observers of a helping situation to a model who refused to help (e.g., Aderman & Berkowitz, 1970; Macaulay, 1970; Rosenbaum, 1956). Rosenbaum exposed subjects to a model who either complied or refused to comply with a high, moderate, or low need request for help. The results showed that as need increased the direct effect of the model's action upon subsequent helping decreased; there was a direct model effect in the low need condition, but no effect in the high need condition. The interpretation offered here is that observers in the low need condition were uncertain regarding the appropriate behavior (the need was stated ambiguously), and thus the action of the model facilitated interpretation of the request and the recognition of the appropriate response. In the high need condition, it was quite evident to observers that

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helping was the appropriate response, regardless of whether the model helped or refused to help. *It is possible that both refusal and compliance by the model activated the representation of the social norm for helping in the high need request condition.*

Macaulay (1970) employed a design that was essentially the same as the high need conditions of Rosenbaum (1956), but included a no-model control condition as well. The research was conducted in a Christmas charity setting, clearly a situation in which donating is an appropriate behavior. Compared with the no-model condition, Macaulay reported greater donating when the model either donated or explicitly refused to donate. Similar findings are reported by Aderman and Berkowitz (1970), whose results showed the greatest amount of helping when the model refused to help and the observers' attention was focused upon the person in need. Again, the interpretation offered for these findings is that in a situation for which the social norm is applicable, the effects of observing a model that exibits *either* normative or anti-normative behavior is the same -- *it activates the representation of the relevant norm and facilitates behavior consistent with that norm.*

These studies can be shown to be directly relevant to the witness effects found in the transgression helping literature when it is noted that the non-helping model in the help-appropriate situation has transgressed against the social norm for that situation. The observers in these conditions are

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essentially witnesses to a norm transgression. Within the modeling literature the behavior of these witnesses is explained by proposing that this increases the salience of the social norm for the event. Within the transgression-helping literature the transgression is against a norm that proscribes harm to others, and consistent with the approach taken in the modeling literature, this social norm would be activated for these witnesses.

The problem that remains is how to delineate a relationship between the increased activation of a norm that proscribes harm, and an increase in behavior consistent with a norm that prescribes help. One way to explain this relationship is to propose that the activation of a harm proscription has a direct effect upon subsequent behavior by increasing the person's tendency to not violate the norm. To the extent that failing to help is perceived to cause harm to the recipient, failure to help will be avoided, and help will be more likely, from persons for whom the harm proscription is salient. However, this explanation seems limited to those situations in which failure to help is harmful, and is difficult to apply when failure to help is inconsequential.

This analysis is similar to one adopted by Rawlings (1970; see also Berkowitz, 1972). Rawlings proposed that witnessing a transgression increases the salience of the relevant social norm, which in turn increases behavioral adherence to that norm. Rawlings suggested further that the increased salience

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of the transgression relevant norm might increase behavioral adherence to the witness' remaining internalized social norms, including the helping norm. However, Rawlings did not elaborate upon this possibility, and instead retained the hypothesis that anticipatory guilt and the accompanying avoidance of actual guilt mediates the effect. Also, Rawlings did not specify how anticipatory guilt regarding the transgresson becomes transformed into anticipatory guilt regarding the helping norm. The cognitive model described below is an attempt to explain how the activation of one social norm can increase behavior consistent with another social norm: How prior harm increases helping.

The cognitive model proposed to explain transgression-helping effects relies upon the concept of social norms and upon the processes that determine the cognitive activation and accessibility of these norms. The model assumes at the outset the existence of social norms. Social norms are general statements of social rules, or standards of conduct, that are espoused by society and learned during socialization. It is proposed that representation of these social norms, are located in a memory store, and that access to the representation of a social norm occurs whenever the individual recognizes a situation to which the norm applies. Activation of the social norm representation should be highly likely when some behavior, either consistent with or in opposition to the norm, is also observed. With respect to trangression events, if the observer

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recognizes the event as a transgression, he must necessarily have activated the relevant social norm.

It is further assumed that an individual's knowledge of social norms is organized within a cognitive structure, such that the representation of one social norm is related in some fashion to the representations of all other norms. For example, social norms might be represented as a network of concept within the person's store of knowledge similar to the networks that have been proposed to represent facts about physical objects (e.g., Collins & Loftus, 1975). Whatever the organizational structure may be, it is proposed that some pairs of social norms will be more distant within the structure than other pairs, and that this distance corresponds with the strength of relation between the norms. One property of cognitive organizational distance is a spreading activation process (Collins & Loftus, 1975), which implies that the accessibility of norm *A*, given prior access to norm *B*, is facilitated to the extent that *A* and *B* are organized closely within the cognitive structure.

This model can account for the transgression-helping effect in the following manner. When a person is exposed to an event that contains a transgression, and the person recognizes the event as a transgression, the social norm relevant to the event becomes activated. When the person is subsequently exposed to a different situation, (e.g., a help opportunity), the norm relevant to that situation will become more easily

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accessible to the degree to which the social norms for the two events are organized closely together. Therefore, if the transgression relevant norm is organized closely with the helping norm, then exposure to the transgression will facilitate access to the helping norm, and increase the probabilty of helping. The prior activation of a social norm that is only remotely associated with the helping norm, on the other hand, will have a much smaller facilitative effect.

The present model does not distinguish between witness and transgressor, not does it require that an actual transgression be observed. Neither does the observer's affective response enter into the model. All that is required to predict a facilitative effect on helping behavior is that a social norm is activated and remains activated until the helping situation occurs. The strength of the relation between the social norm for the first event and the helping norm determines the probability that the helping norm will be accessed, and that helping will occur. According to the model, observing norm-consistent behavior will have equivalent effects, again, so long as the relevant social norm has been activated.

Research Overview

The research conducted to examine the hypotheses described above consisted of two studies. The purpose of Experiment 1 was to determine empirically the perceived relationship, or associations, among a sample of social norm statements, and to choose three of these, according to their degree of

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relationship with the helping norm, to be used in Experiment 2. Included among this set were a statement of social norm that prescribes helping, a social norm that proscribes interpersonal harm, and a social norm that proscribes property damage. The remaining social norm statements were chosen such that, intuitively, they were relevant to a broad range of social behaviors. However, due to the absence of theoretical and empirical literature concerning the category of statements called social norms, no claim for the representativeness of the sample can be made.

Based upon the results of the first study, three social norm statements were chosen for use in Experiment 2. They were chosen such that one was perceived to be closely associated with the helping norm, one moderately associated with the helping norm, and the third only remotely associated with the helping norm. Other considerations entering into this choice were (1) the interpersonal harm norm, or the property damage norm, or both, would be included, due to their relevance to the transgression-helping research, and (2) the ease with which the story could be modified to depict either a norm-transgression or norm-compliance. The research plan for Experiment 2 involved making salient to the subject one of three social norms that was either transgressed or obeyed, and then immediately exposing the subject to a situation in which helping is prescribed by the helping norm, but which does not contain a strong demand to help. Pilot testing for the second

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study was necessary in order to arrive at a helping situation in which the helping task was a non-preferred activity, and the request for help was not in itself a strong reminder of the social norm for helping.

Experiment 1

Subjects. Ninety male and female undergraduates completed the questionnaire in groups ranging in size from 18 to 24. An additional eight subjects were discarded from the sample; two for failing to complete the questionnaire, and six because of obvious language difficulties.

Procedure. In written instructions, subjects were told that the purpose of the research was to find out how they perceived the relationships among a set of social norms. Social norms were defined simply as "general rules of social conduct that cover a wide variety of behaviors." Subjects were asked to read a list of ten social norm statements (see Table 1), and to think about their own definition of the concept "social norm" before reading the instructions for paired-comparison judgments. The instructions for the paired-comparison judgments were as follows:

> On the following pages are listed all possible pairs of the ten norms. For each pair we would like you to indicate on a 9-point scale the degree to which you perceive the two norms to be related, or associated, or similar. We will use the

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> word "similar" to mean closely related, or closely associated, and "dissimilar" to mean the opposite. [*An example of a social norm pair and the rating scale was then given.*] If you judge these two norms to be highly associated, closely related, or very similar, you would circle a low number on the scale, and if you judge this pair to be not at all related, or associated, or very dissimilar, you would circle a high number. If you judge this pair to be similar in some respects, but dissimilar in other respects, you would circle a mid-range number on the scale. Which number you circle would depend upon whether or not you judge the pair to be more similar, or more dissimilar, to each other.

Subjects were asked to read the instructions twice before making the judgments, and they were asked to work quickly.

Subjects made 45 paired-comparison judgments, one rating for each possible pair of social norms. Ten random orders of pairs were constructed, with the restriction that no one social norm statement appeared within two consecutive pairs. Also, for half of the subjects the within-pair order was reversed.

Following the paired-comparison judgments subjects rated each of the social norm statements on twelve 9-point bipolar

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scales and on two other rating scales. One of these final items asked the extent to which the social norm was similar to or different from their own concept of social norm. This part of the questionnaire consisted of ten pages, one for each of the ten social norm statements, and was included for exploratory purposes only.

When both parts of the questionnaire were completed, subjects were asked to indicate their age and sex on the first page. The purpose of the research was explained, and they were dismissed.

Results

The complete set of paired-comparison judgments were first summarized according to the age and sex of subject: No appreciable differences due to age or sex of respondent emerged. Since only the relationships between the helping norm and all other norms are important for the present research, only these are reported here. Table 1 reports these similarity judgments for males, females, and the combined sample.

The choice of social norm statements for use as story themes in Experiment 2 was determined by the following considerations; the relevance to the transgression-helping research, minimal differences in the ratings between sexes, and the ease with which a suitable story could be constructed. Accordingly, the interpersonal harm norm was chosen for the closely related norm condition, the property damage norm was chosen for the moderately related norm condition, and the speed

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Table 1

Perceived Similarity Judgments Between the Helping Norm (A person should help others when it is possible to do so) and the Remaining Social Norms

Social Norm	Males n=55	Females n=35	Combined n=90
A person should donate to charity if he can.	1.60	1.69	1.63
A person should not harm another person without cause.	2.58	2.29	2.47
A person should not damage another's property.	3.96	3.34	3.72
A person should respect other people's points of view.	4.22	3.40	3.92
A person should not litter in public places.	4.20	5.34	4.64
A person should try to succeed at the things he does.	4.80	4.54	4.70
A person should vote when he has the opportunity.	4.91	5.43	5.11
A person should not cheat at games or other contests.	5.24	6.11	5.58
A person should drive according to the speed limit.	5.71	5.63	5.67

Note. The lower the mean, the greater the perceived relationship, association, or similarity.

limit norm was chosen for the remotely related norm condition.

The responses to the questionnaire item asking for a judgment of the similarity between these social norms and the subject's definition of the concept of a social norm revealed that the helping norm (M = 2.50), the interpersonal harm norm (M = 2.48), and the property damage norm (M = 2.48) were judged to be similar to the concept "social norm", while the speed limit norm was judged to be less related (M = 5.75; F (3,356) = 26.20, $p < .01$).

Experiment 2

The purpose of Experiment 2 was to affect a person's willingness to help by making salient one of the three social norms (Harm, Damage, or Speed) prior to the presentation of a helping opportunity. In order to distinguish between the effects of observing a transgression and the effects of social norm salience, social norms were made salient within a norm transgression context and a norm compliance context. While affect-reduction hypotheses (e.g., Cialdini et al., 1973) would predict different effects in these two conditions, the cognitive model predicts no differences. The second prediction of the cognitive model is that the increase in probability of helping would be greatest in the harm-norm-salient conditions, less in the damage-norm-salient conditions, and least in the speed-norm-salient conditions compared with the control conditions. In addition, there should be greater probability of helping in the harm-norm-salient conditions than in the

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speed-norm-salient conditions. Although other measures of helping were obtained, the probability of helping, as indicated by the decision to begin the helping activity, provdes the best evidence for activation of the helping norm available in this experiment. Other measures of helping, such as amount of help are most likely affected by variables that are irrelevant to norm activation (e.g., cost of helping, *cf.* Schwartz, 1977).

Method

Subjects. One hundred and ninety-two undergraduates (83 males and 109 females) enroled in introductory psychology courses at the University of Alberta participated in the experiment. Subjects were randomly assigned to the conditions of a 3 (Social Norm) X 3 (Salience-Outcome) between subjects factorial design. In addition, approximately 100 subjects participated in pilot research.

Materials. Each of the nine stories had the same main character, a University student named Norman. Norman was described as being in the habit of arriving at university early enough in the morning that he could enjoy a relaxing cup of coffee before his classes began. This habit was quite strong; Norman believed that his morning coffee was necessary for adequate functioning, and he became irritable without it. On the day of the event described in the stories, Norman had slept in, was unable to relax with his morning coffee, and as a result was anxious, irritable, and disorganized for the rest of the day. The stories were written in the third person, and

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described Norman's behaviors, and his thoughts and feelings during the event. All story versions referred to Norman's coffee habit, and to the fact that he had slept in, but the events that followed differed according to Social Norm and Salience-Outcome conditions. (See *Appendix A* for complete texts of the stories.)

(1) *Interpersonal harm norm*. In this story, Norman was in his first lecture of the day, and was having difficulty concentrating. His problems were compounded when someone began asking "know it all" questions, and Norman became annoyed. While leaving class, Norman found himself walking beside this person, and his annoyance increased. The following three endings constituted the Salience-Outcome manipulation for this story. (1) *Transgression*: Norman considered giving the person an 'accidental' shove into the desks, and then did so. Norman's friend saw the event, and said to Norman, "You should not have hurt him; you had no good reason. People should not harm others without cause." (2) *No transgression*: Norman considered the harmful act, but then reconsidered. He acknowledged to himself that this person was not the real cause of his annoyance, and decided to skip his next class and have coffee instead. The final sentence read, "Norman realized that people should not harm others without case." (3) *Control*: In this version of the story, the possibility of a transgression was never mentioned. Norman simply recognized the source of his irritabililty, and decided to skip class and get some

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coffee. No social norm statement was presented or implied.

(2) *Property damage norm*. This story described the rotten day Norman has had at university, and listed several frustrating events, all of which were due to his own inattention and disorganization. Later in the day Norman was at a study booth in the library, feeling very frustrated, and in a bad mood. The following three endings constituted the Salience-Outcome manipulation for this story. (1) *Transgression*: Norman thought of ways to vent his feelings, and considered carving an obscene message on the desk top. Although he realized that it was university property, he saw it as no great cost to replace ("They have a budget for replacing furniture."). Norman carved his message, but realized after that it was now impossible to write on the desk. The story ended with the following sentence. "He realized that people should not damage other people's property." (2) *No transgression*: Norman considered carving his message, but before doing so realized that the desk top would be useless if he did so and he decided to go home instead. The final sentence in this condition was the same as in the transgression condition. (3) *Control*: In the control condition story Norman does not consider property damage. Instead, he realized that he will get nothing accomplished at his studies, and decided to go home and watch TV. No social norm was mentioned or implied.

(3) *Speed limit norm*. The setting for this story occurred early in the day, as Norman was leaving home for classes. He

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was anxious about arriving in time to have coffee, and was clearly in a hurry. His route to the university went past a school yard, which had a reduced speed limit. (1) *Transgression*. While Norman approached the school zone he realized, on the one hand, that the lower speed limit was posted in order to protect the children, but on the other hand, that he was a careful and alert driver, and that no children were near the street. Norman decided not to slow down for the school zone, and no mishap occurred. Once through the zone, Norman saw in his mirror that the children were suddenly chasing a ball across the street, and Norman regretted his decision. The final sentence read "People should obey the speed limit." (2) *No transgression*: As in the transgression condition, Norman debated whether or not to slow down, but finally decided to slow down. When Norman saw the children on the street behind him he was glad of his decision. The final sentence was the same as in the transgression condition. (3) *Control*: In this condition, instead of going past the school, and having to solve a dilemma regarding speeding, Norman chose a different route to the university. In this condition, Norman never considered breaking any traffic laws, and no social norm was mentioned or implied.

It was necessary to ascertain whether or not the relationships between social norms made salient in these stories were the same as those reported in Experiment 1. During pilot testing twelve subjects (both male and female)

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read either the transgression stories or the no transgression stories, and then made paired comparison judgments, identical to those made by subjects in Experiment 1, between these three social norms and the helping norm. The order of relationship reported in Experiment 1 was preserved: The similarity ratings between Help and Harm were *M* = 2.67; between Help and Damage were *M* = 5.40; and between Help and Speed were *M* = 7.00. While these similarity judgments differ in magnitude from those found in Experiment 1, subjects in this procedure made far fewer judgments, and made them within a different context. For the present purposes it is sufficient to note that presenting a social norm within a story context did not affect the order of the similarity judgments between the helping norm and the three social norms chosen for Experiment 2.

Procedure. Subjects participated individually in private rooms. When a subject arrived s/he was seated at a table on which were placed a written page of instructions, a cassette tape recorder, a Soma puzzle, and an Etch-A-Sketch. The experimenter asked the subject to read and listen to the instructions, and to notify the experimenter when the instructions were over. The subject was then left alone. (See *Appendix B* for the verbatim instructions.)

The instructions described the experiment as one concerned with memory for words and phrases appearing within a story. Subjects were informed that they would (1) read and listen to a brief story, (2) have their choice of activities during a delay

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period, (3) then complete a "Memory Refresher" questionnaire which would consist of questions about the story, and (4) complete a recognition test. These instructions also described the delay procedures in some detail. Subjects were told at this time the experimenter would give them a folder that would contain descriptions of three delay activities, and that they would be required to read each description before making their choice. The free choice was emphasized, and subjects were informed that they could choose to do nothing if they wished.

Following these instructions, the experimenter brought the subject a folder containing a written story and a cassette tape which contained the story. These folders and tapes were identified by number only, and the experimenter was unaware of the subject's experimental condtion. The subject was left alone while reading and listening to the story, and notified the experimenter when the story was over.

The experimenter then returned and introduced the delay activities. The descriptions of these were each on a separate page, and were delivered in a folder. The experimenter handed the folder to the subject, said "The delay period begins now. Please read the instructions on the folder. I will return when the delay period is over", and then left the subject alone. The written instructions explained that subjects were free to do whatever they wished, but instructed the subject to read the descriptions of all three activities first, before deciding how to spend their time. No importance was attached to these

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activities; they were ostensibly provided for people who preferred to do something rather than nothing during the delay period.

The three activity options made available to subjects during the delay period were a vowel crossing task, which served as the helping task, an Etch-A-Sketch toy, and a Soma puzzle. The vowel crossing task consisted of a page having 27 rows of letters, and subjects were instructed to cross off the *a*s and *o*s that appeared within three spaces of another *a* or *o*. The Etch-A-Sketch is a mechanical drawing toy, and the Soma puzzle consists of a number of irregular pieces that fit together to form a cube. The selection of these activities was arrived at during pilot testing, during which time the helping task was altered to make it less interesting to subjects, and the alternate activities were increased in attractiveness. The final 14 subjects in pilot testing participated in the Experiment 2 procedure except that no request for help was made. Only three of these (21%) voluntarily worked on the vowel crossing task, and only one of these spent the full delay period working on it. It was concluded from this result that the vowel crossing task was the least attractive of the three delay activity options, and that the base rate for the vowel crossing task was sufficiently low to allow for helping effects due to the manipulations to be detected.

The first activity described in the folder was the vowel-crossing task. Attached to the task page itself was a

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letter to the experimenter, ostensibly from a colleague, requesting help in collecting some performance data for the vowel-crossing task. The letter de-emphasized need for help (e.g., it not necessary to have the entire page completed; the purpose of the activity was vaguely stated) and emphasized the optional nature of the task (e.g., only 20 to 30 respondents were required). The help request note is reproduced in *Appendix C*. The remaining two pages in the folder described the Soma puzzle and the Etch-A-Sketch.

Dependent measures. During the delay period the subject was surreptitiously observed through a one-way mirror. The mirror was disguised as a bulletin board on the subject's side of the wall. The five minute delay period was begun as soon as the subject finished reading the descriptions of the activities. The main dependent measure was recorded at this time. Any subject who worked on the vowel-crossing task was recorded as having helped. The experimenter recorded the amount of time spent on the helping task, and later, the number of lines completed and the number of vowels crossed off.

Following the delay the subject completed two questionnaires. The first of these, the "Memory Refresher" questionnaire (see *Appendix D*), contained items to check the story manipulations, and a measure of the subject's affective response to the story. Subjects were asked to write the theme, or primary message of the story, to rate the affective tone of the story, and to rate their own affective response to the

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story. Other items were ratings of story quality, and evaluations of the main character (good/bad, positive/negative, and should be praised/blamed; these ratings were summed to form an evaluation index). The second questionnaire was a recognition test for words and phrases that appeared in the story, and was included in the procedure to maintain the cover story until the suspiciousness probe could be administered. The list of items to be recognized included words from each of the stories (50 items), and an additional ten words related to helping.

Subjects notified the experimenter when the questionnaires were completed, and they were then probed for suspiciousness and fully debriefed.

Results.

Data from 12 subjects were omitted from the analyses. Six subjects were suspicious of the purpose of the research, four were discarded due to procedural errors, and two were eliminated because of language difficulties. There were 20 subjects remaining in each experimental condition, approximately 8 males and 12 females. All dependent measures were submitted to a 3 (Social Norm) X 3 (Salience-Outcome) X 2 (Sex of Subject) analysis of variance.

Judgments of stories and manipulations. The memory refresher questionnaire included several items concerning subjects' perceptions of the stories and manipulations. Eighty-nine percent of subjects reported that the events in the

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stories were realistic, and there were no differences among conditions. Subjects also reported that the events depicted in the stories were easily imaged (M = 7.43 on a 9-point rating scale), again with no differences among conditions.

The Social Norm conditions were perceived to differ in affective tone F (2,162) = 19.73, $p < .01$, and in evaluations of Norman, F (2,162) = 7.77, $p < .01$ (the evaluation index was formed by summing the judgments of positive/negative, good/bad, and praise/blame). The affective tone of the stories was more negative in the harm condition (M = 6.98) and in the damage condition (M = 6.82) than in the speed condition (M = 5.18, $p <$ .05 by Duncan's multiple range test). Evaluations of Norman were more negative in the harm condition (M = 6.13) and in the damage condition (M = 5.65) than in the speed condition (M = 5.16, ps $< .05$). The harm and damage conditions differed at $p < .07$. These effects are shown in Table 2. There were no other significant Social Norm main effects.

As a check on the success of the norm salience aspect of the Salience-Outcome manipulation, subjects were asked to write the theme, or primary message, of the story. The responses were scored "2" if the appropriate social norm was mentioned, "1" if the transgression or potential transgression was mentioned, and "0" if neither of these items were mentioned. In the norm salient conditions (transgression and no-transgression conditions combined) 57% stated the social norm, an additional 28% only mentioned the relevant transgression,

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Table 2

Significant Social Norm Manipulation Main Effects

	Social Norm			
Dependent Variable	Harm	Damage	Speed	F-ratio
Tone of story	6.98_a	6.82_a	5.18_b	19.73
Evaluation Index	6.13_a	5.65_a	5.16_b	7.77

and 15% mentioned neither of these. In the control conditions only 4% mentioned any possible transgression, and none made any reference to a social norm. These coded responses were submitted to an analysis of variance, which revealed only a main effect for Salience-Outcome, F (2,162) = 85.06, $p < .01$. The norm salience scores were greater in the transgression condition (M = 1.43) and in the no-transgression condition (M = 1.38) than in the control condition (M = 0.08, ps < .05 by Duncan's multiple range test).

The success of the outcome aspect of the Salience-Outcome manipulation (transgression versus no-transgression conditions) was shown by significant main effects for Salience-Outcome on the perceived affective tone of the story, F (2,162) = 11.98, $p < .01$, and on the evaluation index F (2,162) = 16.51, $p < .01$. The tone of the story was judged to be more negative in the transgression condition (M = 6.87) and in the control condition (M = 6.65) than in the no-transgression condition (M = 5.47, $p < .05$) and Norman was evaluated more negatively in the transgression condition (M = 6.12) and in the control condition (M = 5.84) than in the no-transgression condition (M = 4.86, ps < .05 by Duncan's multiple range test).[1]

Subjects also reported the feelings they experienced while reading the story on a 9-point scale labeled "Positive feeling"

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[1]There was also a significant Social Norm X Salience-Outcome X Sex of Subject interaction for the evaluation index, F (4,162) = 3.47, $p < .01$. This interaction is irrelevant to the experiment, and will not be described or discussed.

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(1), "Neutral/none" (5), and "Negative feeling" (9). An analysis of variance revealed only a main effect for Salience-Outcome, F (2,162) = 4.64, $p < .02$. Subjects reported feeling more negatively in the transgression condition (M = 5.98) than in the no-transgression condition (M = 5.10, $p < .05$ by Duncan's multiple range test). The mean for the control condition fell between these extremes (M = 5.55), and did not differ from the other two conditions. Reported strength of feelings was not affected by the manipulations. The results described above are reported in Table 3.

Helping behavior. Overall, 40% of subjects helped by working on the vowel-crossing task for part or all of the delay period. There were no significant main effects or interactions due to Sex of Subject. An analysis on the helping score (where 1 = help and 0 = not help)[2] revealed only a main effect for Salience-Outcome, F (2,162) = 7.91, $p < .01$. Subjects were more willing to help in the norm salient conditions (transgression, M = 46.67%; no-transgression, M = 53.33%) than in the no norm salient control condition (M = 20.0%, $p < .05$). Similar effects were found for the amount of helping. More lines of the helping activity were completed in the norm salient conditions (transgression, M = 5.32; no-transgression, M = 6.32) than in the control condition (M = 2.47; F (2,162)

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[2]The analysis of variance F test for dichotomous data has been shown to be robust with respect to violations of assumptions in a Monte Carlo study by Hsu and Feldt (1969). On this basis the analysis of variance of the percent helping measure was considered to be appropriate.

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Table 3

Significant Salience-Outcome Main Effects

	Salience-Outcome			
	Norm Salient		Non-salient	
Dependent Variable	Trans.	No Trans.	Control	F-ratio
Tone of story	6.87_a	5.47_b	6.65_a	11.98
Evaluation index	6.12_a	4.86_b	5.84_a	16.51
Affective response	5.98_a	5.10_b	5.55_{ab}	4.64
Norm salience	1.43_a	1.38_a	0.08_b	85.06

= 4.17, $p < .02$), and more vowels were crossed off in the norm salient conditions (transgression, M = 9.80; no-transgression, M = 12.45) than in the control condition (M = 4.63; F (2,162) = 4.12, $p < .02$). Subjects also spent more time helping in the norm salient conditions (transgression M = 92.12 sec; no-transgression, M = 109.50 sec) than in the control condition (M = 42.33 sec; F (2,162) = 5.16, $p < .01$). There were no significant within cell correlations between the subjects' reported affective response and any of these measures of helping (overall, $r(180) = -.07$, *NS*). The means described above for the helping measures are reported in Table 4.

Although the Social Norm X Salience-Outcome interaction was not significant for any of the helping measures, comparisons among conditions were made in order to test the specific predictions for the experiment. It was predicted that helping would be more likely following exposure to a social norm closely related to the helping norm than following exposure to a remotely related social norm. A comparison between the harm norm salient conditions and the speed norm salient conditions on the percent helping measure supported this prediction, $X^2(1) = 5.01$, $p < .05$. As shown in Table 5, subjects were more willing to help when the harm norm was made salient (60%) than when the speed norm was made salient (35%). This comparison was also significant for the time measure (harm norm salient, M = 114.00 sec; speed norm salient, M = 65.02 sec; $t(78) = 1.83$, $p < .05$, one-tailed test) but not for the

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Table 4

Significant Effects for the Helping Measures

	Salience-Outcome			
	Norm salient		Non-salient	
Dependent Variable	Trans.	No trans.	Control	F-ratio
Percent helping	46.67_a	53.33_a	20.00_b	7.91
Time spent (sec)	92.12_a	109.50_a	42.33_b	5.16
Lines completed	5.23_a	6.23_a	2.47_b	4.17
Vowels crossed off	9.80_a	12.45_a	4.63_b	4.12

Table 5

Percent Helping as a Function of Social Norm and Salience-Outcome Conditions

Salience-Outcome	Social Norm: Harm	Damage	Speed	$\bar{x}$
Salient:				
Transgression	60	50	30	46.67
No Transgression	60	60	40	53.33
$\bar{x}$	60.0	55.0	35.0	
Non-salient Control	15	25	20	20.00
$\bar{x}$	45.0	45.0	30.0	

number of vowels crossed off.[3]

In addition, specific comparisons showed that the Salience-Outcome main effect for the percent helping measure was due more to the salience manipulation within the harm condition (norm salient, 60%; control, 15%; $X^2(1) = 10.90$, $p < .05$) than within the speed condition (norm salient, 35%; control, 20% $X^2(1) = 1.43$, *ns.*). Similar differences were found for the time measure; subjects spent more time helping in the harm norm salient conditions ($M = 114.0$ sec) than in the harm control condition ($M = 42.65$ sec; $t(58) = 2.31$, $p < .05$), but did not spend significantly more time helping in the speed norm salient conditions ($M = 65.02$ sec) than in the speed control condition (M 35.50 sec; $t(58) = 1.16$, *ns.*). However, this pattern of results was not found for the number of lines completed or the number of vowels crossed off. For both the harm condition and the speed condition there were more lines completed and more vowels crossed off in the norm salient conditions than in the control conditions.

A further analysis within the norm salient conditions provides additional evidence for the predicted effects of norm salience on helping. Of those subjects who reported the social norm in response to the theme question (the social norm can be assumed to be especially salient to these subjects), 59% helped, while those subjects who did not report the social

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[3]A multivariate test of this comparison, with Hottelling's T^2 statistic, using all four helping measures, was not significant, $T^2(4,75) = 5.76$, $p > .10$.

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norm, 38% helped; $X^2(1) = 4.89$, $p < .05$. The correlation between the percent help measure and the norm salience measure (i.e., responses to the "theme" question) was $r(180) = .30$, $p < .01$.

Recognition test. Recognition performance for the whole experiment was 71.7% correct. An additional 39% of recognitions made were false, and of these 17.9% were help related words (1.39 help words per subject). There were no discernible differences between experimental conditions for any of these aspects of the recognition performance data.

Discussion

The results of Experiment 2 supported the main hypothesis of the present research. Helping was more likely to occur in response to a helping situation when an immediately preceding event made salient to the observer a social norm that is closely associated with the helping norm than when the preceding event made salient a remotely associated social norm, or no social norm at all. Experiment 1 showed that a helping norm and an interpersonal harm norm were judged to be closely associated, and that the helping norm and a norm regarding speeding were not closely associated. Based upon this result, it was predicted and found in Experiment 2 that making salient the interpersonal harm norm increased subjects' willingness to help, while making the speed limit norm salient had a lesser, non-significant effect on helping behavior. The process assumed to mediate this effect is that access to the cognitive

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representation of the helping norm was differentially facilitated by the prior activation of another social norm.

While the percent helping results in the norm salient conditions were in the predicted order, the harm and damage norm salient conditions resulted in nearly identical levels of helping. Based upon the similarity judgments in Experiment 1, one would have expected a greater difference between these two conditions. There are several possible explanations for this equivalence, although none of them can be assessed with the present data. First, it is possible that the threshold for activation of the helping norm was achieved in both conditions, resulting in equivalent helping levels, even though the activation levels differed as predicted by the cognitive model and the results of Experiment 1. In other words, there was sufficient helping norm activation in the damage conditions, and more than sufficient activation in the harm conditions, but the excess activation in the latter conditions does not increase helping further. Second, it is possible that the nature of the helping activity and the alternative activities employed in Experiment 2 produced a response ceiling for the experiment. Regardless of the strength of norm activation, then, a certain percentage of subjects would *always* choose an alternate activity instead of the helping activity. This response ceiling could be raised by increasing the attractiveness of the helping activity, decreasing the attractiveness of the alternatives, or both. Third, it is

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possible that there was a partial confound between the social norm variable and the story context employed in these conditions. The harm and damage stories had university settings, while the speed story did not, but the data were always collected in a university setting. The high correspondence between story and experiment setting in the harm and damage conditions may have facilitated helping behavior, while the low correspondence in the speed conditions would not. However, since the same pattern of helping behavior was not obtained in the control conditions, an explanation based upon context correspondence is unlikely to be correct.

In terms of previous helping behavior research, the present research focused upon the transgression-helping phenomenon and specifically upon an alternative explanation of previously reported findings. The most comprehensive explanation for transgression-helping effects that has been proposed thus far is the negative state relief hypothesis (Cialdini et al., 1973). This hypothesis states that the observer or perpetrator of a transgression experiences a general negative affect state and is motivated to seek relief from this negative state. Since helping others supposedly has self-reinforcement consequences for the donor, helping behavior becomes one method to relieve negative affect that results from observing a transgression. This hypothesis is inadequate for explaining the present results, however. First, while differences in reported affective response were found between

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the transgression and no transgression conditions, there were no differences between these conditions in the frequency or amount of helping. Second, while there were no differences in affective response between the control condition and either the transgression and no transgression conditions, there was significantly less helping in the control condition than in the two norm salient conditions. In addition the possibility that positive mood generated by the no transgression condition stories increased helping in those conditions (see, e.g., Isen, 1970) is unlikely. Subjects in these conditions reported neutral affect (65% of these circled either 4, 5, or 6 on the self report affect scale) rather than positive affect in response to the story. Thus, both negative affect and positive affect explanations have difficulty accounting for the helping behavior of subjects in the present research. However, since the measure of affect was obtained after the opportunity to help, the results described above do not provide a serious challenge to the negative state relief hypothesis.

The cognitive model outlined in the introduction can provide an adequate explanation for the results, and for the transgression-helping phenomenon in general. The activation of social norms and the cognitive relations among these norms empirically determined in Experiment 1 are sufficient to explain the helping behavior of subjects in Experiment 2. Exposure to the occurrence or non-occurrence of a hypothetical transgression had equivalent effects on helping, so long as a

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social norm closely related to the helping norm was made salient to the subjects in these conditions. When no social norm was made salient (control) or when a remotely associated social norm was made salient (speed conditions), less helping occurred, as predicted by the cognitive model.

An additional feature of Experiment 2 is also consistent with the norm activation model. Subjects in the control conditions, in which a request for help was made but no social norm was made salient, were no more likely to work on the helping task than were those subjects in the pilot testing phase of the research who did not receive a request for help. It might be concluded from this result that the request for help, by itself, had at best a very weak facilitative effect on the accessibility of the representation of the helping norm. The additional facilitative effect derived from activating a closely associated social norm seems to have been necessary in order to activate the representation of the helping norm to any significant extent.

Apart from its relevance for the transgression-helping research, the present findings, and the cognitive model presented here to explain them, are relevant to a more general issue within the helping behavior literature: Are social norm based hypotheses necessary or useful for understanding, explaining, or predicting helping behavior phenomena?

Normative explanations of helping behavior have not provided the major theoretical perspective for helping behavior

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research for over a decade. Darley and Latane (1970) concluded that social norms were relatively unimportant determinants of helping behavior when compared with the magnitude of effects that were found for situational variables. Krebs (1970) also questionned whether the level of normative explanation that prevailed at that time increased our understanding of helping acts, but he expressed some hope for the eventual usefulness of the normative approach and to some extent foretold the present approach: "Understanding the effects of norms, it would seem, awaits elicidation of their cognitive-affective representations" (Krebs; p. 295). The most important issue raised by critics of the social norm explanation was that its proposed intervening process of norm activation could not be distinguished from non-normative process (e.g., empathy, mood, reward-cost analyses, etc.) in terms of the behavioral predictions made in the research. In this early research circular post hoc explanations were common, and easily made (e.g., Darley & Latane, 1970): The activation of the helping norm was assumed to have occurred only when helping behavior was observed, and when helping did not occur, norm activation was presumed not to have occurred (Krebs, 1970; Schwartz, 1973).

Schwartz' (1973, 1977) solution for the circularity problem of the normative explanations was to focus upon the concept of *personal norm*. According to Schwartz (1973) a personal norm is a behavioral expectation or obligation that

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people hold for themselves. While a personal norm is based upon socially shared norms, it is a personal modification of these due to the person's knowledge of and experiences with the social norm. For the purposes of his research, at least, Schwartz has reduced the concept further yet. His approach has been to measure the individual's personal norm with respect to a *particular behavioral event* (e.g., "... would you feel a moral obligation to donate bone marrow?", Schwartz, 1973), and then to use this individual difference measure to predict volunteering with respect to the same behavior some months later. While Schwartz avoids the circularity problem by independent measurement of the personal norm and behavior, his operational definition of personal norm does for the concept social norm what Fishbein and Ajzen (1975) have done for the concept of attitude -- social norms become useful explanatory concepts only when reduced to specific behavioral "intention-like" statements.

The social norm approach employed in the present research does not require the specific individual defintion of personal norm used by Schwartz (1973) in order to have predictive and explanatory utility. It was sufficient for the present purposes to define social norms as *general statements of appropriate and inappropriate social conduct*, and to assume that the representations of these general statements are contained within some organized knowledge structure in memory. In other words, the person's knowledge of appropriate and

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inappropriate social conduct are what comprise the person's social norms. The success of the predictions based upon this conception of social norms was made, not by obtaining measures of specific personal norms, but by introducing the assumption that social norms are organized within a cognitive structure in memory, in much the same manner as is knowledge about animals, vegetables, and minerals. In the present research, independent measurements of a certain aspect of this organizational structure (distances, or strength of relations between social norm representations) were used to predict the amount of norm-consistent helping behavior in Experiment 2. These predictions were made with the assumption that a spreading activation process (Collins & Loftus, 1975) could be applied to the social norm cognitive structure, and that an intervening process of differential facilitation of social norm activation would occur.

Darley and Latane's (1970) criticism that social norms seem to have little impact on helping behavior cannot be applied to the present research. Those situation and temporary state variables that occur in Experiment 2 (the observation of a transgression and negative mood or affect), which have previously been thought to influence helping behavior in other settings, cannot account for the helping behavior of subjects in the present research. The manipulation of norm salience and the strength of relation among social norms can account for these helping results, and the cognitive model applied to

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social norms adequately explains them. The present research also avoids the circulatory problem: Organizational "distance" was assessed independently from helping behavior in Experiment 1, and these measures were employed to make the predictions for Experiment 2.

Research prognosis for the cognitive model.

The helping behavior predictions made in Experiment 2 were based upon a cognitive model having a sequence of steps. (1) The observation of a social transgression event activates in the observer the cognitive representation of the social norm relevant to the transgression, so long as the observer recognizes the event as a transgression (i.e., as counter-normative). While the observation of a transgression event is an essential component of the drive-reduction models, for the present model any event that activates a social norm is a sufficient precondition for the following steps. (2) The activation of this social norm, so long as it is maintained, facilitates accesss to the representations of other social norms to the extent that their representations are organized closely together within the memory structure. (3) When a second social event is then presented, access to the cognitive representation of its social norm depends, in part, upon the extent to which its accessibility is facilitated by the activation of the social norm for the first event. The closer the relation between the representations of the two social norms, the greater the facilitative effect. Of course, access

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to the representation of the social norm for the second event also depends upon the power of that event, by itself, to access the relevant social norm (see (1) above). And (4), a behavior consistent with the social norm for the second event becomes more likely if that social norm is accessed than if it is not. This step is a basic assumption of any normative theory of behavior (e.g., Berkowitz, 1972; Schwartz, 1977).

The results of the research are relevant to several of these steps. Experiment 1 provides initial data regarding the strength of relations among a set of social norms. However, it can only be assumed at this point that the paired comparison judgments obtained in Experiment 1 correspond with the strength of relations between the cognitive representations of these social norms. Convergent results from research employing more social norms and a variety of research methods might be necessary before an adequate description of social norm organization can be provided. At present, one can at least say that Experiment 1 results have some utility, since they successfully predicted many aspects of the results of Experiment 2. Experiment 2 is essentially an examination of step 3 above. Differential facilitation was assumed to occur, and was measured by the rate of helping. The use of this helping measure, of course, assumes step 4 to be true. Clearly, more research is necessary in order to examine the details of the model.

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For example, the question regarding how the social norm for the initial event becomes activated was not relevant in Experiment 2 -- the social norm statement was explicitly presented in that study in order to insure this step of the process -- but the question is pertinent for explaining many of the transgression-helping experiments. In examining this issue, future research might present to subjects a social event, and then measure recognition latency for a relevant versus irrelevant social norm statement. If the social event activates the relevant social norm, one would expect faster recognition of the social norm. A similar procedure might be to ask an evaluative versus non-evaluative question about the event immediately following presentation of the event, and before the social norm recognition task. Since social norms are relevant for moral evaluation processes (Harvey, 1980), one might expect faster recognition when the evaluative question is asked.

The strength of relations among the representations of social norms, an issue addressed to a certain extent in Experiment 1, can be investigated further using procedures similar to those described above. It should be possible to conduct research within a "priming" paradigm using social norm statements as stimuli, in which the presentation of a stimulus social norm statement is followed by the presentation of a target social norm statement. Recognition of the target statement, as assessed by accuracy and response speed, should

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be facilitated to the extent that the target and the stimulus statements are organized closely together.

While it was assumed in the present research that the representations of all social norms were directly related to all others within the cognitive structure, this need not be the case. In fact, there is some evidence from the results of the present studies to suggest that this assumption is unwarranted. While the Help norm and the Harm norm were judged to be more closely related than the Help norm and the Damage norm in Experiment 1, these three social norm statements were all judged to be strongly related to the concept of "social norm." In addition, making salient either the Harm norm or the Damage norm in Experiment 2 had equivalent facilitative effects on helping behavior. On the basis of Experiment 1 results, one would expect a greater effect for Harm than for Damage if the relational paths among these norms were direct. However, this result in Experiment 2 is compatible with the proposition that the representations of these three social norms are similarly related through the mediating representation of the "social norm" concept. In other words, activation spreads from the Harm or Damage norm, for example, to the representation of the concept "social norm," and then to the representation of the Helping norm. If this were the case, the relational paths from Harm to Help and from Damage to Help would have equivalent strength, since they are equally related to the mediating concept, and on this basis equivalent facilitation of access to

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the helping norm would be predicted.

This analysis might be extended further. The structure of social norm representations could be organized around subsets of social norms. For example, Harm, Help, and Damage may belong within the "social-interpersonal" subset, while others, such as Speeding and Littering (see Table 1) might belong in a "legal" subset, and still others, such as Voting and Trying Hard (see Table 1) might belong in a "self-relevant" subset. Future research with these possibilities in mind, conducted along the lines of Experiment 1, might discover subset relations such as these within the set of social norm statements.

Another fruitful avenue of research based upon the cognitive model of social norms would use the exact same procedure as Experiment 2, but investigate a norm based social behavior other than helping. With respect to aggressive behavior, for example, it can be predicted from the model that making salient a closely related social norm such as Help or Damage would inhibit subsequent harmful behavior, compared with suitable control conditions. In principle, it should be possible to affect *any* social norm based behavior simply by making salient to the actor a closely related social norm immediately prior to the behavioral event in question.

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References

Aderman, D., & Berkowitz, L. Observational set, empathy, and helping. *Journal of Personality and Social Psychology*, 1970, *14*, 141-148.

Berkowitz, L. Social norms, feelings, and other factors affecting helping and altruism. In L. Berkowitz (Ed.), *Advances in experimental social psychology*. Vol. 6. New York: Academic Press, 1972.

Carlsmith, J. M., & Gross, A. Some effects of guilt on compliance. *Journal of Personality and Social Psychology*, 1969, *11*, 232-239.

Cialdini, R. B., Darby, B., & Vincent, J. Transgression and altruism: A case for hedonism. *Journal of Experimental and Social Psychology*, 1973, *9*, 502-516.

Collins, A. M., & Loftus, E. A spreading-activation theory of semantic processing. *Psychological Review*, 1975, *82*, 407-428.

Darley, J. M., & Latane, B. Norms and normative behavior: Field studies of social interdependence. In J. Macaulay & L. Berkowitz (Eds.), *Altruism and helping behavior*. New York: Academic Press, 1970.

Darlington, R. B. & Macker, C. Displacement of guilt-produced altruistic behavior. *Journal of Personality and Social Psychology*, 1966, *4*, 442-443.

Fishbein, M., & Ajzen, I. *Belief, attitude, intention, and behavior: An introduction to theory and research.*

University of Alberta

Reading, Mass.: Addison Wesley, 1975.

Freedman, J. L. Transgression, compliance, and guilt. In J. Macaulay and L. Berkowitz (eds) *Altruism and helping behavior*. New York: Academic Press, 1970.

Freedman, J. L., Wallington, S., & Bless, E. Compliance without pressure: The effect of guilt. *Journal of Personality and Social Psychology*, 1967, *7*, 117-124.

Harvey, M. D. Effects of outcome severity and knowledge of "ought" on moral evaluations. *Personality and Social Psychology Bulletin*, 1980, in press.

Hoffman, M. L. Developmental synthesis of affect and cognition and its implications for altruistic motivation. *Developmental Psychology*, 1975, *11*, 607-622.

Hsu, T-C., & Feldt, L. S. The effects of limitations on the number of criterion scores on the significance level of the *F*-test. *American Educational Research Journal*, 1969, *6*, 515-527.

Isen, A. M. Success, failure, attention, and reactions to others: The warm glow of success. *Journal of Personality and Social Psychology*, 1970, *15*, 294-301.

Katzev, R., Edelsack, L., Steinmetz, G., Walker, T., & Wright, R. The effect of reprimanding transgressions on subsequent helping behavior: Two field experiments. *Personality and Social Psychology Bulletin*, 1978, *4*, 326-329.

Klass, E. T. Psychological effects of immoral actions: The

University of Alberta

experimental evidence. *Psychological Bulletin*, 1978, *85*, 756-771.

Krebs, D. L. Altruism - An examination of the concept and a review of the literature. *Psychological Bulletin*, 1970, *73*, 258-302.

Macaulay, J. R. A shill for charity. In J. Macaulay and L. Berkowitz (eds), *Altruism and helping behavior*. New York: Academic Press, 1970.

McMillen, D. L. Transgression, self-image, and compliant behavior. *Journal of Personality and Social Psychology*, 1971, *20*, 176-179.

Pepitone, A. Toward a normative and comparative biocultural social psychology. *Journal of Personality and Social Psychology*, 1976, *34*, 641-653.

Rawlings, E. Witnessing harm to other: A reassessment of the role of guilt in altruistic behavior. *Journal of Personality and Social Psychology*, 1968, *10*, 377-380.

Rawlings, E. Reactive guilt and anticipatory guilt in altruistic behavior. In J. Macaulay and L. Berkowitz (eds), *Altruism and helping behavior*. New York: Academic Press, 1970.

Regan, D. T., Williams, M., & Sparling, S. Voluntary expiation of guilt: A field experiment. *Journal of Personality and Social Psychology*, 1972, *24*, 42-45.

Regan, J. W. Guilt, perceived injustice, and altruistic behavior. *Journal of Personality and Social Psychology*,

University of Alberta

1971, *18*, 124-132.

Rosenbaum, M. The effect of stimulus and background factors on the volunteering response. *Journal of Abnormal and Social Psychology*, 1956, *53*, 118-121.

Rushton, J. P. Generosity in children: Immediate and long-term effects of modeling, preaching, and moral judgment. *Journal of Personality and Social Psychology*, 1975, *31*, 459-466.

Rushton, J. P. Socialization and the altruistic behavior of children. *Psychological Bulletin*, 1976, *83*, 898-913.

Schwartz, S. H. Normative explanations of helping behavior: A critique, proposal, and empirical test. *Journal of Experimental and Social Psychology*, 1973, *9*, 349-364.

Schwartz, S. H. Normative influences on altruism. In L. Berkowitz (ed). *Advances in experimental and social psychology Vol. 10*. New York; Academic Press, 1977.

Staub, E. Instigation to goodness: The role of social norms and interpersonal influence. *Journal of Social Issues*, 1972, *28*, (3) 131-150.

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Appendix A

1. Harm norm stories.

Norman woke up later than usual that morning, and as a result he did not have enough time before his first lecture of the day to have his early morning cup of coffee. Norman always found that a cup of coffee before class relaxed him, and took the "edge" off the day's activities. He believed it to be a bad start whenever he missed his coffee, and it made him grouchy and argumentative. It certainly had this effect on him today.

There was a guy in one of Norman's classes that he disliked, for no apparent reason, even though they'd never met or even spoken to each other. It seemed to Norman that this guy was always carrying a philosophy book and some computer output around, for all the world to see, and it bugged Norman because he believed that the guy did it in order to impress others with his breadth of knowledge. He knew from past experiences that he could not get along with that type of person -- their personalities clashed -- and he always avoided interpersonal contact with them as much as he could.

On this particular day Norman's nerves were "on edge". He was having a difficult time concentrating on the lecture, and following the simple steps of the professor's argument. The lack of a morning coffee had certainly made things difficult for him. Just as he began to understand what was being said,

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the guy that Norman disliked asked a question that seemed totally off the topic, and his brief understanding of the lecture was gone. It's one of his show-off questions, Norman decided; he does things like this to impress the Prof., and a couple of chicks who sat nearby. It annoyed Norman to see that the girls seemed to be overly attentive, and his grouchiness intensified further when it appeared that the Prof. was praising the guy for his "insightful remarks". He resented the fact that the Prof. and this guy would waste the class time with what should have been a private conversation. When the lecture ended, Norman was in a far nastier mood than he was when the lecture began. At first, it was just the lack of coffee that made him grouchy, but that skinny guy with the computer output sure had got on his nerves today; far more than usual, it seemed. In fact, Norman was feeling quite angry as he left his seat at the end of the lecture.

While walking up the aisle to the back of the lecture theater, Norman found himself next to the guy whose question had annoyed him.

(a) *Transgression condition story ending*

(Norman felt unable to control his feelings in this situation, and thought how easy it would be to shove this guy into the seats, and make it look like an accident. It would bring him a considerable amount of satisfaction to hurt this guy in some way. Without warning, Norman pushed hard, and the skinny guy ended up in among the desks, bruised and shaken,

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Norman apologized, claiming that he was jostled by someone else. But the friend who was with him knew what had really happened, and told him -- you should not have hurt him; you had no good reason. People should not harm others without cause.

(b) *No transgression condition story ending*

Norman felt unable to control his feelings in this situation, and thought how easy it would be to shove this guy into the seats, and make it look like an accident. It would bring him a considerable amount of satisfaction to hurt this guy in some way. But Norman reconsidered; it wasn't this guy's fault, really -- it was the lack of coffee that had made him so grouchy. He had no good reason to hurt the guy. Norman decided to skip his next class, and relax with a coffee or two. That would eliminate his grouchiness. Norman realized that people should not harm others without cause.

(c) *Control condition story ending.*

Norman felt unable to control his feelings in this situation, and knew then that he could not manage the rest of the day in such a mood. He decided to skip his next class, and relax with a coffee or two. That, he thought, would eliminate his grouchiness.

2. Damage norm stories.

Norman was in a foul mood that day. While nothing serious had gone wrong, none of the little things that make a day run smoothly had gone according to plan. To start with, his alarm clock had failed to go off, and he hadn't had time to relax and

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enjoy a cup of coffee before his first class. He always felt anxious when he missed his early coffee, and today was no exception. In his first lecture he had asked a reasonable question, but the professor had obviously misunderstood, and had made it clear to the rest of the class that the question was trivial. If only I'd had my morning coffee, thought Norman, my question would have been more clear, and I wouldn't have been put down.

Lunch time had not gone any better. He had waited half an hour for Jane to meet him for lunch, only to remember at the last minute that their date was for the following day. By this time, of course, the cafeteria had run out of his favourite sandwich, and he had to settle for a bland egg salad sandwich and some potato chips. His afternoon lab added to his frustrations. While pouring a solution from one container into several others, his hand got too close to the burner. He instinctively jerked his hand, slopping some of the solution onto the table. As a consequence, his results were inaccurate, and he expected to lose a few marks because of it. It wouldn't have happened if I wasn't so tense, thought Norman. All these little frustrations had multiplied throughout the day, all because he hadn't had a relaxing cup of coffee that morning.

Norman was thinking over these events of the day while sitting in a study booth in the library. He had planned to write a book review for his English class, but he was unable to keep his mind off his troubles long enough to construct even

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the outline. He could not stop thinking about the rotten day he had had, and his foul mood became more intense. He had to do something to rid himself of this negative emotional build-up.

(a) *Transgression condition story ending.*

As Norman sat there, fuming, he remembered how good it always felt when frustrated to kick something or break something. Lashing out at the environment released the negative energy, and erased the frustrations that the world had placed in his way. He thought of the pen-knife that he carried in his pocket, and it occurred to him that carving an obscene remark, directed at the world in general, on the table top would provide the emotional release that he sought. Norman had never considered a behavior like this before. Previously, when annoyed, he would damage some unwanted thing of his own. But this was different; the table top was not his property. After a moment of hesitation Norman decided that the University wouldn't care -- they had a budget to replace furniture anyway. He took out his knife and carved his message, and instantly felt some relief. But thinking it over on his way home, he realized that a large part of the table top was destroyed, and useless for writing on -- he realized that people should not damage other people's property.

(b) *No transgression condition story ending.*

As Norman sat there, fuming, he remembered how good it always felt when frustrated to kick something or break

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something. Lashing out at the environment released the negative energy, and erased the frustrations that the world had placed in his way. He thought of the pen-knife that carried in his pocket, and it occurred to him that carving an obscene remark, directed at the world in general, on the table top would provide the emotional release that he sought. Norman had never considered a behavior like this before. Previously, when annoyed, he would damage some unwanted thing of his own. But this was different; the table top was not his property. After a moment of hesitation Norman decided that the University wouldn't care -- they had a budget to replace furniture, anyway. He took out his knife, and was about to carve, when he realized that a large part of the table top would be destroyed, and that it would then be useless for writing on. He put his knife away, and decided that his frustration could be relieved as easily by a quiet evening in front of the TV set. He had realized that people should not damage other people's property.

(c) *Control condition story ending.*

Since he was getting nowhere with his school work that evening, he decided to call it quits, and went home. The day had been a waste of time for him, and rather than continue to struggle with his foul mood, Norman thought that a few hours in front of the TV set would take his mind off his troubles. He promised himself that tomorrow he would not miss his morning cup of coffee -- that would guarantee a day without frustrations.

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3. Speed norm stories.

Norman was late getting up that morning. Although he was still in plenty of time for his 9:30 class, sleeping in seriously upset his daily routine. It was his habit to always arrive at the University in time to have a leisurely cup of coffee before attending any lectures. He firmly believed that a cup of coffee was essential for intellectual functioning -- coffee soothed the body and alerted the "grey cells". For Norman, morning coffee was a strong habit; a ritual; a way of life.

He dressed quickly, never noticing until later in the day that his blue sweater clashed with his green shirt. He put a slice of bread in the toaster, gulped down some orange juice, put on his coat, and grabbed the toast to munch on the way to his car. As he drove out of the alley into the avenue, he felt vaguely anxious. It was as if his morning coffee were the only guarantee he could cling to for a hassle-free day. With this thought in mind, he stepped on the gas pedal, squealing his tires a bit, but he did not exceed the 50 km/hr limit by very much -- the pavement was too uneven for that.

The shortest route from his apartment to the University was to travel the side streets, which meant going through a school zone that was two blocks long. Generally, he slowed up when going past the school, but he was generally in plenty of time for coffee as well. Today was a different situation. It was an inconvenience to have to slow down to 25 km/hr for a

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couple of blocks, just on the off chance that one of the little kids hadn't yet learned a healthy respect for cars. He thought about coffee, the relaxing aroma of coffee, and the vague anxiety that he felt became a little bit stronger.

As Norman approached the school yard he saw several children playing with a ball about thirty yards from the road, and their presence reminded him that there was a school zone, and a lower speed limit. And he also thought again of his morning coffee, and with it his chances for a pleasant day, that he would not doubt miss if he slowed down. It was a dilemma, and he quickly assembled the evidence for and against slowing down. What was the possibility that one of the kids would chase the ball across the street? Pretty remote, he thought. The kids weren't playing that close to the road. And besides, his eyesight was keen, and his reflexes were good -- there was really very little danger at all. On the other hand, the reduced speed limit was there for a reason; to guard against that remote possibililty.

(a) *Transgression condition story ending.*

Norman proceded past the school without slowing. He saw that the children were keeping their distance, and no mishap occurred. Past the school, he glanced into the rear view mirror. A ball had skooted across the road, and two small children were chasing it, laughing. Norman regretted the decision that he had made -- people should obey the speed limit.

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(b) *No transgression condition story ending.*

Better safe than sorry, thought Norman, and he slowed down while passing the school. He saw that the children were keeping their distance, and no mishap occurred. Past the school, he glanced into the rear view mirror. A ball skooted across the road, and two small children were chasing it, laughing. Norman was glad of his decision -- people should obey speed limit.

(c) *Control condition story ending.*

The *control condition story was identical with the above up to and including the first two paragraphs, but the last three paragraphs changed, and were as follows*:

The shortest route from his apartment to the University was to travel the side streets, which usually meant going past the two schools near his home. But today, since the rush traffic had already disappeared, Norman thought that a slightly different route from his usual one would be quicker. This plan appealed to him because it meant that he might yet arrive in time for that all important cup of coffee prior to classes. Unless the traffic light is red, he thought, it will be non-stop all the way.

There was very little traffic at that time of the day, but ahead of him Norman could see that the light was red. He thought about coffee, the relaxing aroma of coffee, and the vague anxiety that he felt became a little bit stronger. He tried to remember whether or not this traffic light was a long

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one or a short one. He also thought again of his coffee, and with it his chances for a pleasant day, that he would no doubt miss if he had to stop at the light.

As if in response to his worries, the green light appeared. Norman felt relieved, now that he was so close to enjoying his coffee habit. He wouldn't have as much time to enjoy it as he would have liked -- maybe only ten minutes. But even a rushed cup of coffee was a better start to the day than no coffee at all.

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Appendix B

Taped and Written Instructions for Experiment 2

This research is concerned with memory for material that is presented in story form. A particular story might be remembered more easily for a variety of reasons. In this study we are interested in the effects of particular words and phrases upon memory for the whole passage.

The procedure that we are using is an attempt to simulate a natural sequence of events. For example, after you read a story, or hear one told to you, you generally engage in some unrelated activities before it is necessary to recall the story. It might be because you have an exam in the material, or because someone asks you what the story was about.

There will be four steps in the procedure for this research.

1. You will read and hear a brief story once only.
2. You will then have a choice of several activities to do during a short delay period. At this time you may choose to do only one thing, or a little of each activity, or you can choose to do nothing at all. What you do during the delay time is up to you.
3. After the delay, you will answer a number of memory refresher questions. These questions are designed to jog your memory for the story, and are very general in nature.
4. You will then complete a recognition test of words and

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phrases from the story. You will be asked to indicate which words from a long list of words were in the story that you read. One strategy for remembering words from a story is to remember the major theme, and the main point of the story. People are generally able to reconstruct much of the story if they can remember just these two things about it.

In a minute the experimenter will bring you a written copy of the story, and a cassette for you to listen to. As soon as the story is over, please close the folder, and do not look at the story again. Also, please shut off the tape recorder. The experimenter will then return with a folder that contains activities for the delay period. Please look through all the activities in the folder immediately, and then decide what you want to do, if anything. It does not matter if you choose to do nothing. You can, if you wish, simply wait until the delay period is over.

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Appendix C

The Request-for-Help Note

January 23, 1980

Mike:

Here's the vowell-crossing task I told you about. I would like to know if some of the participants in your research would help me with it. Since I only need responses from twenty or thirty people, you can make this task optional. This way, I think it will fit into your procedure quite well.

I need some basic data on this task in preparation for some research that I'm planning. Of course, its not necessary for anyone to do the whole page -- if someone chooses to help me with this, any number of lines would do. Could you show this note to your participants?

Thanks,

Jeff

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Appendix D

Memory Refresher Questions

Please answer each of the following questions:

1. In one or two sentences, write the them, or the primary message of the story.

2. What was the general affective tone of the story?

   Positive feeling 1 2 3 4 5 6 7 8 9 Negative feeling

3. Did you experience any feelings at all while readingthe story?
   If so what were they like?

   Positive feeling 1 2 3 4 5 6 7 8 9 Negative feeling
   neutral/ none

4. How strong was this feeling?

   No feeling at all 1 2 3 4 5 6 7 8 9 Strong feelings

5. Did the story describe an event that was life-like?

   Yes _____ No _____ (check one)

6. How well were you able to imagine the events in the story?

   Not very well 1 2 3 4 5 6 7 8 9 very well

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7. How would you describe your general reaction to the main character in the story? (Please respond to *each* of the following scales).

Positive	1	2	3	4	5	6	7	8	9	Negative
Good	1	2	3	4	5	6	7	8	9	Bad
Should be praised	1	2	3	4	5	6	7	8	9	Should be blamed

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Appendix E.1

ANOVA Source Table; Affective Tone of Story

Source	df	MS	F	p
Social Norm (A)	2	58.51	19.72	.001
Salience-Outcome (B)	2	35.53	11.98	.001
Sex of Subject (C)	1	20.01	6.75	.01
A X B	4	0.14	0.05	ns
A X C	2	0.92	0.31	ns
B X C	2	3.86	1.30	ns
A X B X C	4	1.50	0.51	ns
Error	162	2.97		

Appendix E.2

ANOVA Source Table; Evaluation Index

Source	df	MS	F	p
Social Norm (A)	2	14.38	7.77	.001
Salience-Outcome (B)	2	30.55	16.51	.001
Sex of Subject (C)	1	6.69	3.61	.06
A X B	4	1.19	0.65	ns
A X C	2	3.11	1.68	ns
B X C	2	5.37	2.90	.06
A X B X C	4	6.43	3.47	.01
Error	162	1.85		

Appendix E.3

ANOVA Source Table; Affective Response to Story

Source	df	MS	F	p
Social Norm (A)	2	3.34	1.30	ns
Salience-Outcome	2	11.91	4.64	.02
Sex of Subject (C)	1	7.37	2.78	ns
A X B	4	0.52	0.20	ns
A X C	2	0.33	0.13	ns
B X C	2	1.78	0.69	ns
A X B X C	4	2.88	1.12	ns
Error	162	2.57		

Appendix E.4

ANOVA Source Table; Norm Salience Manipulation Check

Source	df	MS	F	p
Social Norm (A)	2	0.29	0.70	ns
Salience-Outcome (B)	2	35.25	85.06	.001
Sex of Subject (C)	1	0.22	0.52	ns
A X B	4	0.19	0.45	ns
A X C	2	0.09	0.22	ns
B X C	2	0.11	0.27	ns
A X B X C	4	0.60	1.46	ns
Error	162	0.41		

Appendix E.5

SNOVA Source Table; Percent Helping

Source	df	MS	F	p
Social Norm (A)	2	0.44	1.93	ns
Salience-Outcome (B)	2	1.82	7.91	.001
Sex of Subject (C)	1	0.08	0.37	ns
A X B	4	0.18	0.77	ns
A X C	2	0.04	0.16	ns
B X C	2	0.01	0.05	ns
A X B X C	4	0.12	0.52	ns
Error	162	0.23		

Appendix E.6

ANOVA Source Table; Number of Lines Worked

Source	df	MS	F	p
Social Norm (A)	2	78.05	1.41	ns
Salience-Outcome (B)	2	230.65	4.17	.02
Sex of Subject (C)	1	8.53	0.15	ns
A X B	4	53.11	0.96	ns
A X C	2	5.03	0.09	ns
B X C	2	7.32	0.13	ns
A X B X C	4	78.52	1.42	ns
Error	162	55.34		

Appendix E.7

ANOVA Source Table; Time Spent Helping

Source	df	MS	F	p
Social Norm (A)	2	31232.97	2.27	ns
Salience-Outcome (B)	2	70978.56	5.16	.01
Sex of Object (C)	1	3138.99	0.23	ns
A X B	4	5560.27	0.41	ns
A X C	2	7787.56	0.57	ns
B X C	2	6799.86	0.49	ns
A X B X C	4	17627.42	1.28	ns
Error	162	13743.63		

Appendix E.8

ANOVA Source Table; Number of Vowels Crossed Off

Source	df	MS	F	p
Social Norm (A)	2	383.90	1.73	ns
Salience-Outcome (B)	2	915.42	4.12	.02
Sex of Subject (C)	1	23.02	0.10	ns
A X B	4	103.20	0.46	ns
A X C	2	53.71	0.24	ns
B X C	2	50.38	0.23	ns
A X B X C	4	312.18	1.40	ns
Error	162	222.45		

Appendix F.1

Means and Standard Deviations for Tone of Story

		Social Norm		
Salience-Outcome		Harm	Damage	Speed
Salient: Trans	M	7.50	7.35	5.75
	SD	.76	1.73	1.71
No trans	M	6.05	5.95	4.40
	SD	1.96	2.28	1.88
Control	M	7.40	7.15	5.40
	SD	1.54	1.50	1.88

Appendix F.2

Means and Standard Deviations for Evaluation Index

		Social Norm		
Salience-Outcome		Harm	Damage	Speed
Salient: Trans	M	6.92	6.18	5.60
	SD	1.06	1.36	1.45
No trans	M	5.20	5.15	4.23
	SD	1.73	1.68	1.51
Control	M	6.27	5.62	5.63
	SD	1.44	1.36	1.12

Appendix F.3

Means and Standard Deviations for Affective Reaction

		Social Norm		
Salience-Outcome		Harm	Damage	Speed
Salient: Trans	M	6.30	5.75	5.90
	SD	1.34	1.86	1.48
No trans	M	5.35	5.10	4.85
	SD	1.50	1.55	1.50
Control	M	5.75	5.55	5.35
	SD	1.80	1.79	1.53

Appendix F.4

Means and Standard Deviations for Norm Salience Manip. Check

		Social Norm		
Salience-Outcome		Harm	Damage	Speed
Salient: Trans	M	1.45	1.35	1.50
	SD	.69	.81	.69
No trans	M	1.40	1.25	1.50
	SD	.68	.91	.76
Control	M	0.20	0.05	0.00
	SD	.41	.22	.00

Appendix F.5

Means and Standard Deviations for Percent Helping

		Social Norm		
Salience-Outcome		Harm	Damage	Speed
Salient: Trans	M	.60	.50	.30
	SD	.50	.51	.47
No trans	M	.60	.60	.40
	SD	.50	.50	.50
Control	M	.15	.25	.20
	SD	.37	.44	.41

Appendix F.6

Means and Standard Deviations for Time Spent Helping

		Social Norm		
Salience-Outcome		Harm	Damage	Speed
Salient: Trans	M	102.85	123.50	50.00
	SD	130.22	141.28	98.14
No trans	M	125.15	123.30	80.05
	SD	127.14	129.95	120.68
Control	M	42.65	48.85	35.50
	SD	104.18	103.77	82.61

Appendix F.7

Means and Standard Deviations for Lines Completed

		Social Norm		
Salience-Outcome		Harm	Damage	Speed
Salient: Trans	M	6.15	6.75	2.80
	SD	8.11	7.99	5.98
No trans	M	7.85	5.00	6.10
	SD	9.00	6.27	9.59
Control	M	2.15	4.10	1.15
	SD	5.35	8.75	2.72

Appendix F.8

Means and Standard Deviations for Vowels Crossed Off

		Social Norm		
Salience-Outcome		Harm	Damage	Speed
Salient: Trans	M	10.55	13.90	4.95
	SD	17.21	17.06	12.57
No trans	M	14.60	11.85	10.90
	SD	16.46	15.28	17.46
Control	M	5.10	6.60	2.35
	SD	12.46	14.56	7.28